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DAVE RICHARDSON

EAST AND WEST MEET IN CEYLON (Bulletin No. 3) AND EXAMINE DIFFERENCES IN DRESS

Bulletin No. 1, December 6, 1948

Suchow Stands at China's Meeting of Ways

EMBATTLED Suchow of current civil-war news dispatches ranks as a real pivot point in China's transportation system. The city is located at one of the few spots in China proper where two rail lines intersect. Thus it assumes importance in peace and war as a meeting of the ways.

Even before railroads came to China the Suchow site was a natural crossroads. Through centuries of the old Chinese Empire, it figured in military and political strategy. Die-hard empire forces held out at this junction for some years after the establishment of the republic in 1912. Suchow also was the center of Chinese resistance to Japanese aggression for two full months in early 1938.

Tungshan Is More Distinctive Name

Strictly speaking, the name Suchow happens to be an alias—Tungshan is today's official designation for the rail and highway hub 185 miles north of Nanking in the northwest corner of Kiangsu Province.

On the newest maps, the label Tungshan is usually followed by Suchow in parenthesis. Tungshan is the more practical name for readers following the action in China, since it distinguishes the city from at least three other sizable Chinese Suchows.

To peacetime tourists traveling south from Peiping and Tientsin by rail, the city is the point on the Tientsin-Pukow Railway where station architecture turns from ornate to severe.

From 1908 to 1912, German engineers supervised construction of the 420-mile stretch of railroad between Tientsin and Tungshan. Stations along the route reflect their mood of the time for gaudy gingerbread ornamentation.

The British, on the other hand, built without furbelows in erecting stations along the part of the line they constructed. Their part was from Tungshan south, then southeast across fertile Anhwei Province to Pukow, opposite Nanking on the Yangtze.

Yellow River Puts Imprint on Area

Crossing the north-south line at Tungshan is the east-west Lunghai Railway. From the Yellow Sea coast 125 miles east of Tungshan, its course is almost due west and inland to Siking, as the historic walled city of Sian is now known. Stretches of this line along the Yellow River (Hwang Ho) have been dismantled during 11 years of civil war.

Roads as well as railroads contributed to Suchow's growth as a large farm-market center. Wheat, millet, cotton, and peanuts are staple crops of the region. Changing its seaward course ten or more times within recorded history, the Yellow River has deposited fertile silt on large areas of plain (illustration, next page). Vegetables grow well, and south in Anhwei Province is a district famous for watermelons.

The original plans for nationalist army units at Tungshan cast the

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MAYNARD OWEN WILLIAMS

FOG-CLOUDS HIDE MOUNTAIN TOPS FROM THE HAY-ROOFED HOUSES OF CHUBUKHLI, A SOVIET ARMENIAN VALLEY TOWN

The farmers bring the new-cut hay into the village on wagons and pile it high on the roofs of their homes. Through the winter it is fed to the livestock, leaving the housetops flat by springtime. The clouds obscuring Chubukhli Pass are the type of land fog which bothers flyers of the Berlin air lift (Bulletin No. 4).

Submarine Captured in Classic Lake Como

TO capture a submarine off Switzerland may seem an unlikely feat. But it can be done, according to a report from Italy that frontier police have seized a pocket submarine suspected of running contraband between Switzerland and Italy by way of Lake Como (Lago di Como).

Lake Como, surrounded by Italian territory near landlocked Switzerland's southeast border, is more than 100 airline miles inland from the Mediterranean. It is shaped like an inverted Y, with slim arms reaching southwest and southeast.

Romans Liked It

Although less than three miles across at its widest point, this lake is about 30 miles long. It would thus seem to offer ample navigation space for a small submarine such as the suspected smuggler craft, which is described as 12 feet long and operated by foot pedals. The lake has a depth of nearly 1,350 feet. With its surface 650 feet higher than that of the Mediterranean, points on its floor are as much as 700 feet below sea level.

Lake Como has been famous for its scenic beauty since early Roman times. As the ancient Lacus Larius, it was lavishly praised by the poets Virgil and Claudian. Both Plinys are associated with it. Pliny the Younger, who owned property along its shores, wrote his friends of its natural charms.

For modern visitors, trips along the lake unroll a panorama of winding green banks framed by majestic Alpine peaks (illustration, next page). All scenes are accented by olive, almond, and mulberry groves and by bright patches of azaleas and rhododendrons.

From steep hillsides emerge medieval castle ruins, old Roman villas, chapels, palatial residences of former European royalty, tourist hotels, and the big and little summer homes long popular with the well-to-do of near-by industrial Milan (Milano). Dotting the lake are assorted craft that join such centers and resorts as Como, Bellagio, and Lecco. Numerous villages perch on overhanging cliffs or hide in the deep folds of valley mouths.

Missed by Battles

There are small steamers bulging, in normal times, with freight and passengers. The local cockleshell fishing boats with their square white sails mingle with modern motorboats and the barges of commerce. Gaily painted boathouses and pavilions spot the shore line.

During the battle for Italy in World War II Lake Como was north of the main fighting lines. On the approaches to neutral Switzerland, it was west of the Allied drive toward the Brenner Pass through the Alps to Austria and Germany.

When northern Italy's Milan and Turin (Torino) were taken by American forces, however, in the last months of the war, troops reached out to cut off German retreat and to clear the lake settlements of enemy remnants. An important objective at the southwestern end of the lake

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city in the role of buffer against rebel advances toward the capital at Nanking. Chinese guidebooks have distinguished the site of their stand from other Suchows in the past by spelling it Hsuchow.

Best known rival for the name is a city near Shanghai, at the southern end of the same province. Now officially designated Wuhsien, it is famed as Soochow the Beautiful and was once the empire's capital. It has been called the Venice of the Far East because of its canals.

Far west in Kansu Province, just within the northwest limits of China's ancient Great Wall, today's city of Kiuchuan is the Suchow that harbored many a transasiatic silk caravan. Where the Min joins the Yangtze, in southern Szechwan 130 air miles upstream from Chungking, the town of Ipin is another Suchow of the past.

NOTE: Tungshan (Suchow) may be located on the National Geographic Society's map of China. Write the Society, Washington 6, D. C., for a price list of maps.

For additional information on the region of the battle for Suchow, see "Today on the China Coast," in the *National Geographic Magazine* for February, 1945*; and "Taming the 'Flood Dragons' of the Hwang Ho," February, 1942. *(Issues marked with an asterisk are included on a special list of Magazines available to teachers in packets of ten for $1.00.)*

OLIVER J. TODD

BETWEEN FLOODS, MAN AND BEAST STRUGGLE TO RAISE A CROP ALONG CHINA'S YELLOW RIVER

Flood brought the fertile silt; now they pray "river, stay 'way from my door" long enough to let them reap what they have sown. Man, woman, and donkey pull the drill over the "good earth," which, though cracked on the surface, is moist underneath.

Bulletin No. 3, December 6, 1948

Ceylon, Former Crown Colony, Now Dominion

IN Ceylon, newest dominion to enter the British Commonwealth of Nations, how to keep 'em down on the farm is no problem.

Ceylon is the first of Britain's crown colonies to achieve the status of a dominion. About seven-eighths of the population of the Indian Ocean island lives in small agricultural communities and hence it could well be called "The Farmer Dominion."

Much of Land Unsuitable for Farms

For the Sinhalese (also called Singhalese and Cingalese), the red-letter day of their modern history is February 4, 1948. On that date they graduated from the colonial status they had had for 250 years to the new rank of dominion. The island of farmers now has its own cabinet and parliament.

In spite of the fact that agriculture is Ceylon's chief means of livelihood, only limited areas of the island are suitable for farming. Much of the terrain is mountainous. Many sections are low and swampy. There are stretches of rocky, desert wastes. But in the level, fertile parts of the island primitive farming methods produce large crops.

Even so, Ceylon cannot raise enough food to feed its nearly seven million inhabitants. It must import from near-by India half the rice its people eat each year.

Fortunately the wants of the Sinhalese are simple. The banana "tree" helps solve some of their problems. The tree (which is actually a herb as it does not develop a woody trunk or stems like a tree or a shrub) flourishes the year around. It provides food and its leaves serve as plates for the rice and curry that is the chief dish of the islanders.

The women of Ceylon do not bother with changing styles. Like their neighbors in India, they wear the sari. This graceful garment (illustration, cover) is somewhat like the sarong of Bali and the more easterly islands. It is draped in different ways to indicate the home district of the wearer. Sinhalese women don't worry about keeping up with new fashions but continue to dress as their grandmothers did.

Search for Fertile Soil Keeps Some Farmers Moving

The farmhouses of Ceylon are generally made of wattle (interwoven twigs) and clay. Their roofs are thatched with palm leaves. A few houses have whitewashed walls and roofs of tile.

In clearings of an acre or two in the forest, farmers grow rice (illustration, next page), sesame seed, pumpkins, gourds, peppers, tomatoes, and other vegetables. The soil of Ceylon is not very productive. It needs long rest periods between plantings to recover its fertility. When the soil is exhausted, often an area is abandoned, and the whole village moves to a new location.

Most of Ceylon's industry is concerned with the processing of the agricultural products of the island—mainly tea, coconuts, and rubber. There are also factories which produce leather goods, plywood, glass, paper

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was the provincial capital and chief city, Como, center of ancient silk and newer chemical industries.

Just three miles north of Como, Italy, is Chiasso, Switzerland, a small border town which had a brief notoriety during the war. Being the first station in a neutral country, it became a rumor factory of information and misinformation as to what was going on in the Axis nations—Italy and Germany.

NOTE: Lake Como (Lago di Como) is shown on the Society's map of Germany and Its Approaches.

For additional information on the lake region of northern Italy, see "Hunting Castles in Italy," in the *National Geographic Magazine* for September, 1935.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, January 5, 1948, "Milan Sets Italy's Pace in Art and Commerce."

DONALD MCLEISH

BESIDE LAKE COMO, CHILDREN PLAY IN THE SHADOW OF A RENAISSANCE CHAPEL AND MAUSOLEUM

To this cypress-lined plot in north Italy the princely Gonzaga family of Mantua brought its dead for burial, intruding a note of somberness in Lake Como's otherwise gay vacation aspect.

Fog Is Natural Berlin Air-Lift Enemy

FOG—which weather experts predict will team with rain to ruin one out of four flying days for the Berlin air lift in the critical weeks ahead—is an ancient weather problem just beginning to yield ground to scientific countermeasures.

Among the world's worst fog hazards are those that hamper shipping and flying in the Grand Banks region off Newfoundland. Over these North Atlantic waters fog occurs in every month. At maximum in June and July, the gray smothering blankets close down in about six out of ten days.

Friend and Foe in Wartime

Another notoriously foggy area is the English Channel, where, again, June and July are the "pea-soup" months. The fact that the invasion of France opened the "second front" of World War II on June 6, 1944, is a reminder of the army quip that "weather, in war, is always favorable—if you know how to use it."

But on the fog-shrouded Aleutian front of the North Pacific, constant mists over the embattled islands played a dual role. The fog acted as a protective camouflage one moment and as a navigation hazard the next, impartially affecting both United States and Japanese forces. At the same time in the North Atlantic and Arctic waters vast gray-black fogs offered welcome refuge for Russia-bound supply convoys dodging German bombs.

Wartime emergencies speeded up efforts to clear dangerous fogs from vital airfields. The pioneering British system known as Fido (initial letters for "Fog, Intensive Dispersal of") successfully burned fuel along runways to heat the air and lift the fog from the landing path of returning flyers.

Radar warnings and radio guide systems have been developed. It has also been found that fog can be cleared by scattering chemicals to absorb its moisture. It can be turned into rain by bombardment with ear-shattering sirens and powerful but unheard supersonic waves. To pierce the densest fog, "bottled lightning" has been invented in the form of new landing-strip-approach lights. Individual beams of light are augmented to more than three billion candle power.

No Fog in Equatorial Seas

Ordinary fogs are simply clouds near the ground (illustration, inside cover). They form when warm, moist air blows over a cold surface—either land or water—and when cold air blankets warmer surfaces. Three conditions are necessary—moisture in the air, a cooling process causing condensation, and dust, salt, or other tiny particles on which the moisture collects.

The Fido dispersal method, through heat, virtually put the situation in reverse. One of the few places where fogs are nearly nonexistent is in warm equatorial seas, far from land changes.

Modern London, once considered the home of fogs, now sees fewer

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and chemicals. Tea is the most important export of the new dominion.

Colombo, which, with its suburbs, has a population of more than 360,000, is Ceylon's chief port. Two other sizable seaport cities are Jaffna (63,000), on the jagged peninsula at the island's north tip, and Galle (49,000), on the coast south of Colombo.

Kandy, with a population of 52,000, rims a lake in the hill country near the center of the island. It was the ancient capital of Ceylon and still is a city sacred to faithful followers of Buddha. Buddhists, who form Ceylon's most numerous religious group, ascend upon the city in droves every year to worship at the Temple of the Sacred Tooth (of Buddha) and to see the Perahera processions for which the city is famous.

NOTE: Ceylon may be located on the Society's Map of India and Burma.

For further information, see "Ceylon, Island of the 'Lion People,'" in the *National Geographic Magazine* for July, 1948; "Sigiriya, 'A Fortress in the Sky,'" November, 1946*; and "Perahera Processions of Ceylon," July, 1932.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, October 20, 1947, "Ceylon in Transition to British Dominion."

MARLIN T. GRIFFIN

RICE FOR THE MEALS OF CEYLON GROWS ON THE ISLAND'S TERRACED HILLSIDES

Standing almost knee-deep in the flooded field, Sinhalese women plant the rice shoots for the crop which will feed their families. In giant stairsteps (left), rice-set terraces climb the slope. The water-drenched shelves push back the persistent jungle from which palm trees thrust branches like huge feather dusters. Irrigation is an old story to Ceylon where, 1,500 years ago, a king named Dhatu Sena built a reservoir 4,000 acres in extent. Sections of this remain.

Bulletin No. 5, December 6, 1948

Saratoga Park Taps Hudson Valley History

SCHOOL children of New York State's upper Hudson Valley are fortunate in having one of American history's most important lessons laid out before them in the form of Saratoga National Historical Park.

This new unit adds to the National Park Service another bit of America's great outdoors and another site where history was made.

Geography Helped Victory

Saratoga National Historical Park, lying west of the Hudson about 25 miles north of Albany, covers nearly 2,000 acres of land acquired by the federal government over the past decade. Its importance rests on the fact that on the site Americans transformed a British drive towards success into a major defeat that was the turning point of the war.

The open and cultivated country around the park today is a far cry from the deeply wooded land through which the British commander, Burgoyne, tried to fight his way in the summer and fall of 1777. Yet in its rolling hills, deep ravines, and steep river bluffs the visitor can still see the geographic factors that affected the battle.

For the British, the Hudson-Champlain route was a natural invasion avenue into the most densely settled areas of the newly declared republic. Along this path—which not long before had been trod by war-painted Iroquois and the rival forces of France and England—the British plan dictated a triumphant southward movement.

With northbound troops moving up to Albany to join other Redcoats, Hessians, and Indian and Tory allies, the colonies could not only be split in two and prevented from attacking British operations in the south, but weakened in their efforts to obtain essential European aid.

Caused French to Aid Colonies

As the campaign developed, his allies never reached him, and "Gentleman Johnny" Burgoyne, in September, met the Americans for the first battle of Saratoga. Fought at Bemis Heights, a little south of the present town of Schuylerville, then Saratoga, the struggle was costly but inconclusive. The second battle, on October 7, resulted in Burgoyne's surrender to General Horatio Gates and temporary fame for Benedict Arnold, who led a daring attack in defiance of orders.

The surrender took place on October 17. When news of the overwhelming American success reached Paris, the French government entered into an alliance with the colonies that assured final victory four years later at Yorktown. Largely for this reason, Saratoga has been called one of history's decisive battles. Without French and other foreign help, the colonists might easily have lost their fight for independence.

In the park grounds today is a curious monument showing Benedict Arnold's left foot, in commemoration of his wound in the engagement. At Schuylerville a granite shaft honoring the battle of Saratoga has a blank space on one side that symbolizes Arnold's later treason.

On two other sides of the memorial are statues of the commander of the battle, General Gates, and Colonel Daniel Morgan, noted for his rifle

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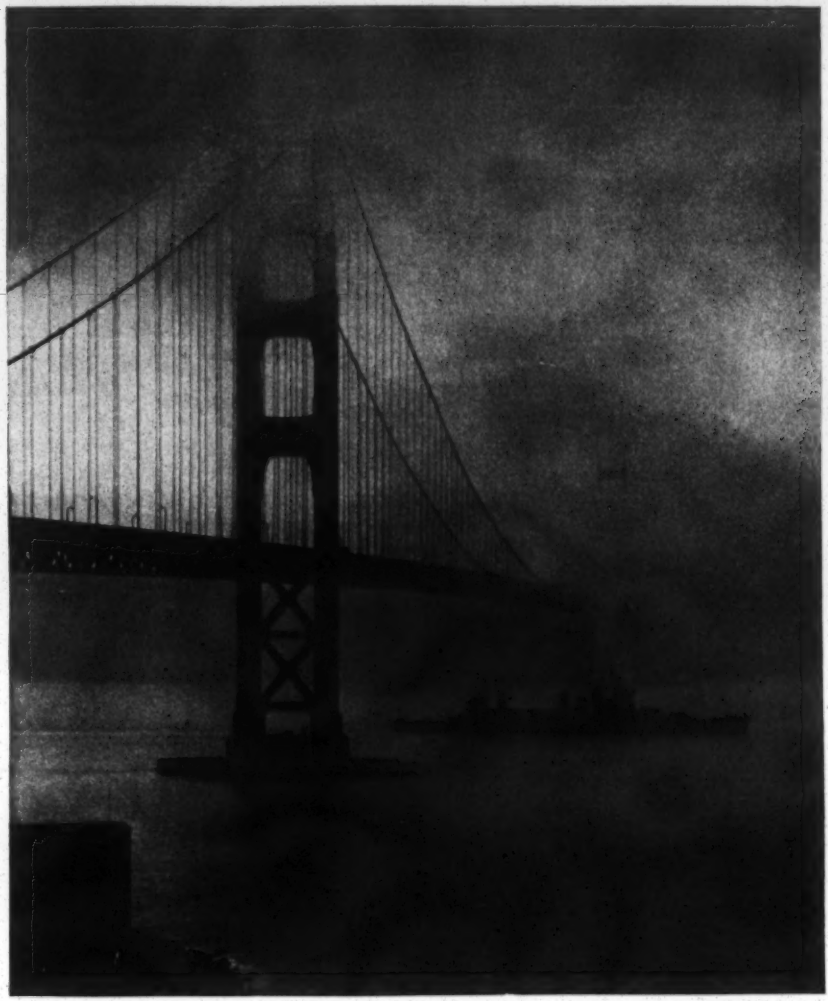
"gray-outs." This is believed to be the result of the substitution of gas and electricity for old dust- and soot-producing fuels.

That smoke and fog can be a tragic combination was demonstrated in 1930 when clouds of "smog" in Belgium's industrial Meuse Valley caused scores of deaths. Again, recently, billowing smog in Donora, Pennsylvania, was followed by respiratory ailments and a number of fatalities.

NOTE: For additional information, see "New Frontier in the Sky," in the *National Geographic Magazine* for September, 1946; and "Weather Fights and Works for Man," December, 1943.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, March 1, 1948, "U. S. Fares Badly in Europe Weather Trade."



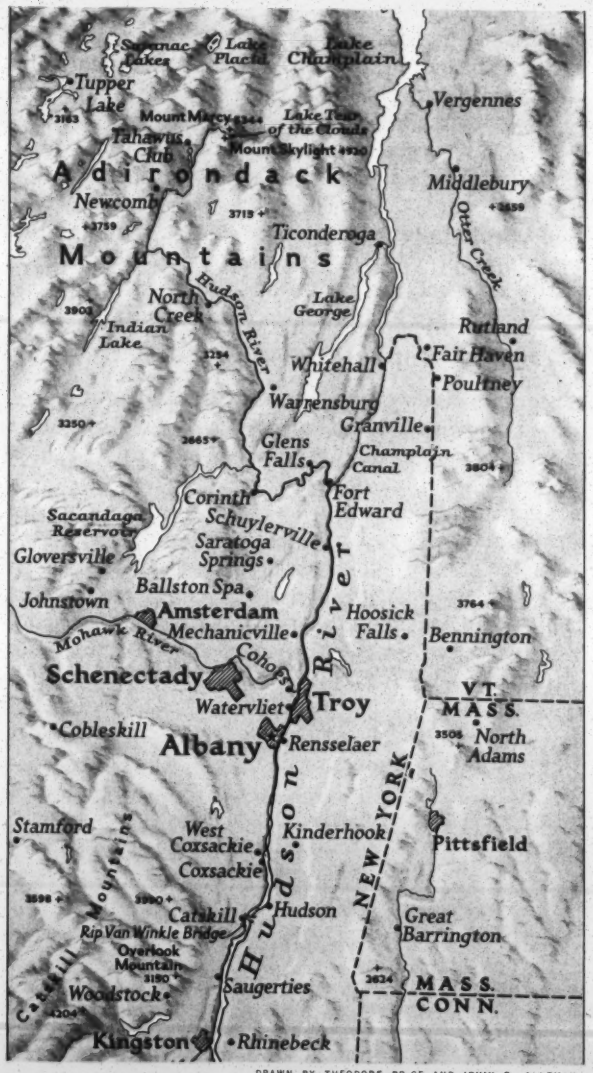
U. S. NAVY, OFFICIAL

"THE FOG COMES ON LITTLE CAT FEET" TO BLANKET SAN FRANCISCO'S GOLDEN GATE BRIDGE

Carl Sandburg's description of fog is recalled by this view of the cruiser San Francisco slipping into its home port. According to the poet, fogs sit "looking over harbor and city on silent haunches and then (move) on."

corps and rallying "turkey calls." The third statue is that of General Philip Schuyler who gave the order whereby a thousand woodsmen held up the British troops by felling trees across their path.

Among the already available park sights which will be developed or added to under the new legislation are the battlefield cemetery, some museum exhibits of arms and equipment, and various monuments and buildings, including Neilson House, the only original battlefield structure.



DRAWN BY THEODORE PRICE AND IRVIN E. ALLEMAN

NORTH OF ALBANY AND TROY, SARATOGA'S HEROES FOUGHT

Burgoyne's army, marching south along the Hudson, was stopped about halfway between Schuylerville and Mechanicsville by aroused militiamen from several states. The final surrender took place in Schuylerville, named for one of the participating American generals.

Twelve miles northwest of the battlefield bubble the famous mineral springs which shortly after the Revolution came to be noted as one of America's leading spas, or watering places. Saratoga Springs has had three heydays: one before the Civil War; one in the 1870's and '80's, after the establishment of horse racing; and recently, after New York State bought the springs and supervised their depleted flow.

As Saratoga Springs grew, the Saratoga on the Hudson near the battle site became known as Old Saratoga. Finally its name was changed to Schuylerville.

NOTE: Saratoga appears on the Society's map of the Northeastern United States.

See also "The Mighty Hudson," in the *National Geographic Magazine* for July, 1948.